

DEMOGRAPHICS
and
LAND
CAPABILITY

DEMOGRAPHICS AND LAND CAPABILITY REVIEW

COUNTY OVERVIEW

Harford County is located in the north central portion of Maryland at the confluence of the Susquehanna River and the Chesapeake Bay (Figure 3). It is bounded by Baltimore County on the west, the Commonwealth of Pennsylvania on the north, the Susquehanna River on the east, and the Chesapeake Bay on the south.

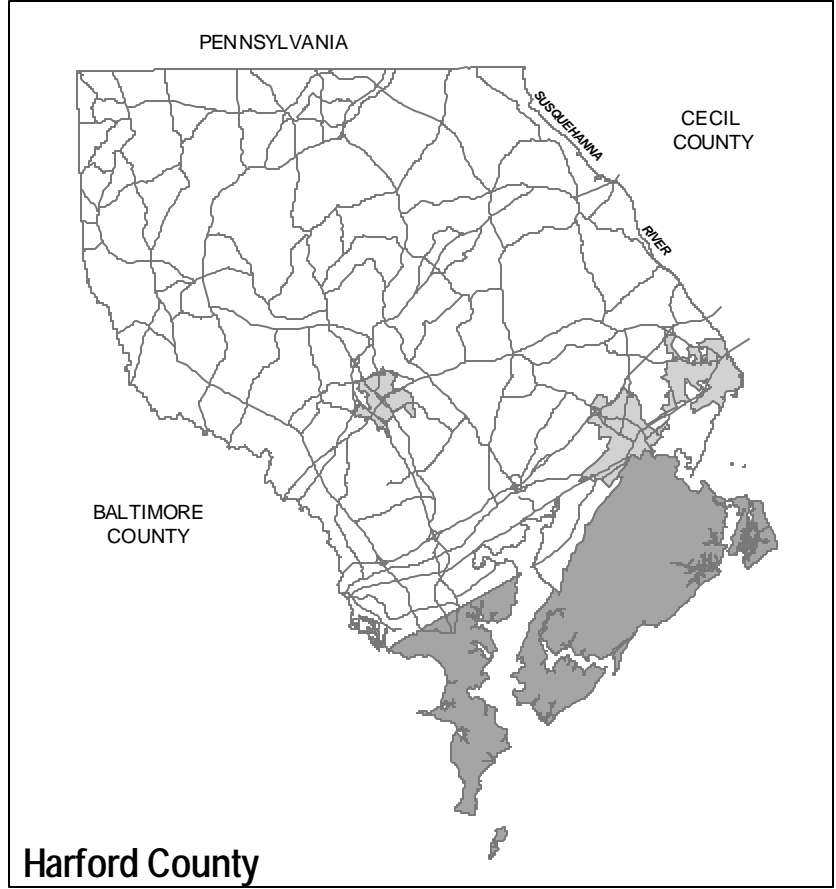
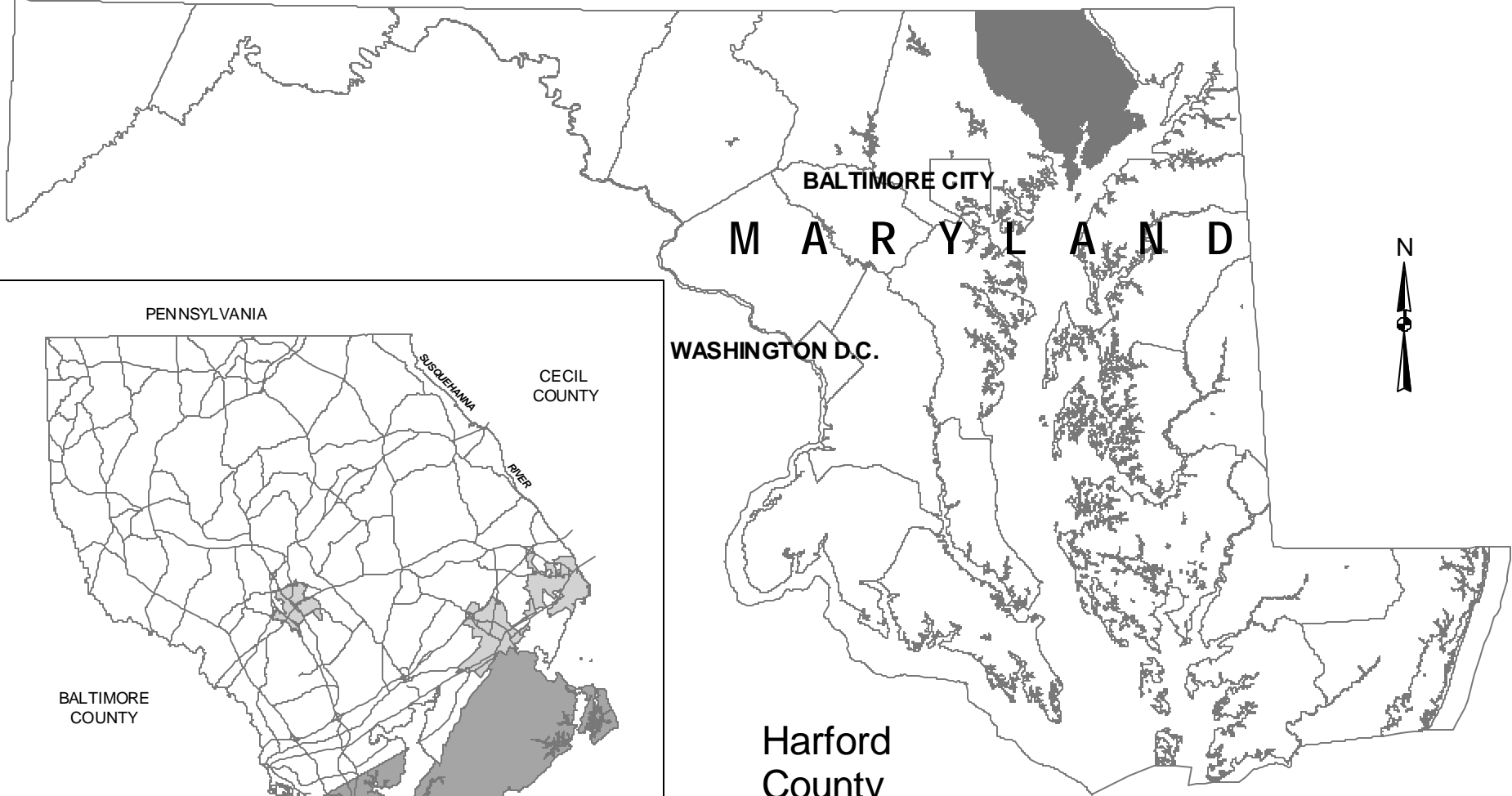
The County has a land area of 440 square miles, or 235,676 acres, and is the 11th largest County in the State of Maryland. Bisecting the County are two physiographic provinces, the Piedmont Plateau and the Coastal Plain. The terrain ranges from the rolling topography of the Piedmont to the gentle slopes of the Coastal Plain. The variety of the County's landscape is further enhanced by the number of major streams and rivers that flow through the area such as the Susquehanna River, Little Gunpowder River, Bush River, Deer Creek, Winters Run, Bynum Run, and Gasheys Run.

Located in the County are three incorporated municipalities, the County seat in the Town of Bel Air, and the cities of Aberdeen and Havre de Grace. All of the municipalities have, or are in the process of, adopting new Comprehensive Plans that address the "Visions" of the 1992 Planning Act. Another major area in the County is Aberdeen Proving Ground (APG), a federal facility created by Presidential Proclamation in 1917, encompassing over 39,000 acres of land. While there are several smaller land holdings belonging to APG throughout the County, the majority of the facility is located on the two peninsulas bordered by the Bush and Gunpowder Rivers and encompassing the majority of the County's Chesapeake Bay waterfront.

DEMOGRAPHICS

In order to define future needs of the County, some basic demographic data has been compiled. This information will be used to guide planning efforts for the life of this plan. The social and economic factors considered include statistical data on population, age distribution, number of households, average household size, number of years lived in a home, type of employment, and household income. The information presented is based on the Censuses of 1990 and 2000. Projections through 2025 have been made using this data.

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BALTIMORE CITY

M A R Y L A N D

WASHINGTON D.C.



Harford
County

Vicinity
Map

Figure 3

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SOCIO-ECONOMIC PROFILE

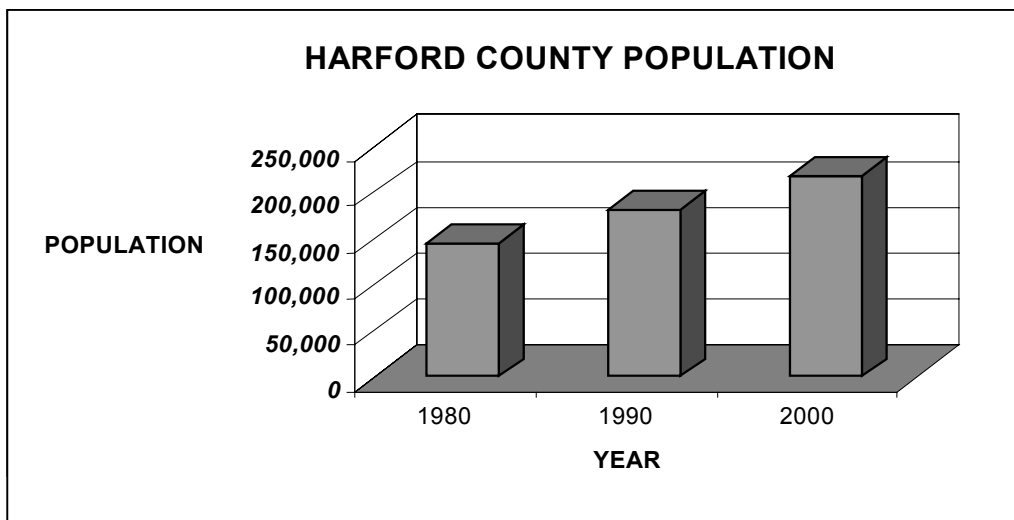


Figure 4

Harford County's population increased 20% between the years 1990 and 2000 (Figure 4), as compared to 25% for the period 1980 to 1990. In 1990 the County's population was 182,132. By 2000 it had increased to 218,590 residents as reported by the U. S. Bureau of the Census, an average annual growth rate of 2%.

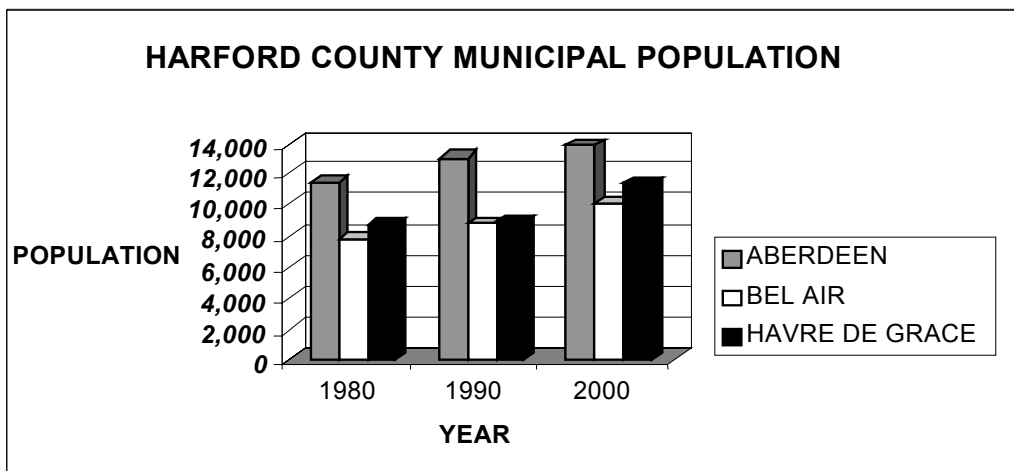


Figure 5

Approximately 16% of the County's population resides in the three municipalities (Figure 5). The largest municipality in the County is Aberdeen with a 2000 population of 13,842. The City of Havre de Grace and the Town of Bel Air had 2000 populations of 11,331 and 9,722 respectively. However, between the years of 1990 and 2000 the City of Havre de Grace experienced the largest percentage amount of growth with a 26% increase in population.

AGE STRUCTURE

While those between the ages of 25 and 44 continued to constitute the majority of the population identified in the censuses of 1990 and 2000, this group experienced only a 6% increase. Increases occurred in all of the age groups except the 19 to 24 age group, which declined 23%. While increases are noted in the 0 through 18 age groups, larger changes occurred in the 45 and above age groups. Both the 45 to 64 and the 65 to 84 age groups increased by 46%. The 85+ age group increased by 65% (Figure 6).

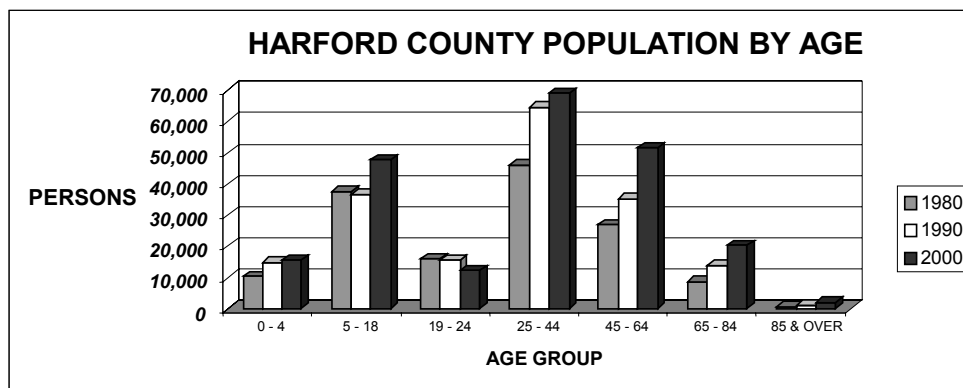


Figure 6

HOUSING

The 2000 Census identified 83,146 housing units in Harford County, an increase of 16,700 units from 1990 (Figure 7). The largest category, single-family dwellings, contains 51,187 units, approximately 62% of the total number of units. The Census also showed that the County experienced a 50% increase in the number of townhouses to 15,107 units, approximately 18% of the total number of units. In the 1990-2000 time period, the number of owner-occupied units increased by 33% while the number of renter-occupied units increased by 6%.

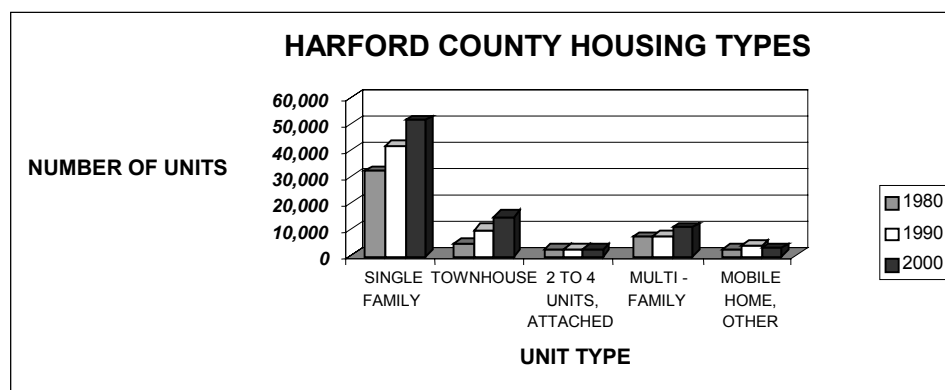


Figure 7

Historically, the average household size in Harford County has been higher than the State average, as is shown in (Figure 8). While this trend continues, household size has steadily declined in the County, falling from 2.83 persons per household in 1990 to 2.72 persons per household in 2000.

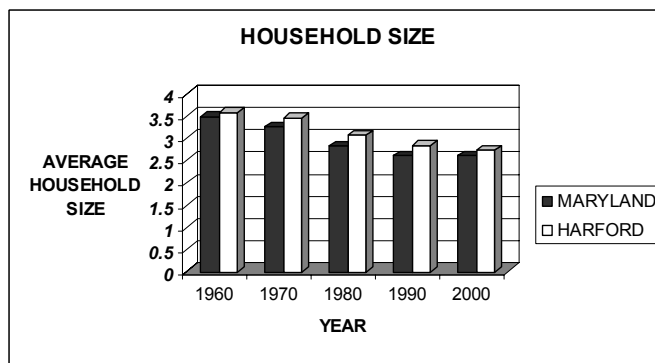


Figure 8

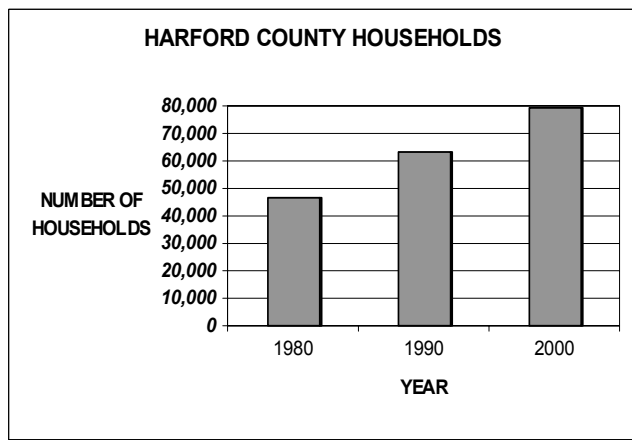


Figure 9

As identified in (Figure 9), the total number of occupied households in the County increased from 63,193 in 1990 to 79,667 in 2000. This reflects an increase of over 20%. Of the households that were established by 2000, approximately 44% (or 35,000 households) had been living in their present home for less than five years (Figure 10).

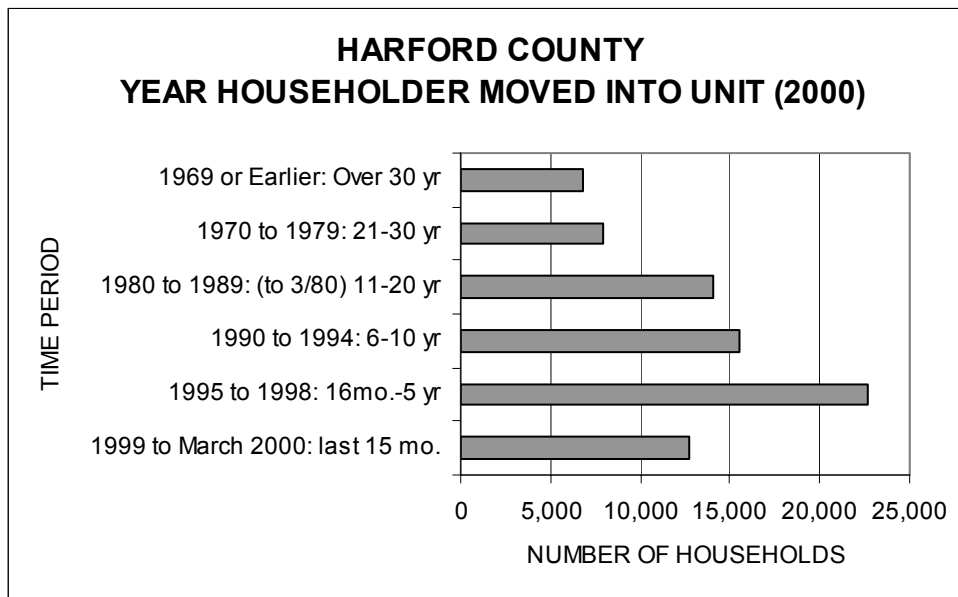


Figure 10

INCOME

Between 1990 and 2000, the median household income for Harford County rose 37%, from \$41,680 to \$57,234. Nearly 25% of the households in the County had an income range between \$50,000 to \$74,999 and the number of households with an income over \$100,000 increased by 39% during these years (Figure 11). Overall, income levels in the County have improved since 1990. Based on Census 2000 data, the poverty rate for families considered living at the poverty level is 3.6% as compared to 4.1% in 1990.

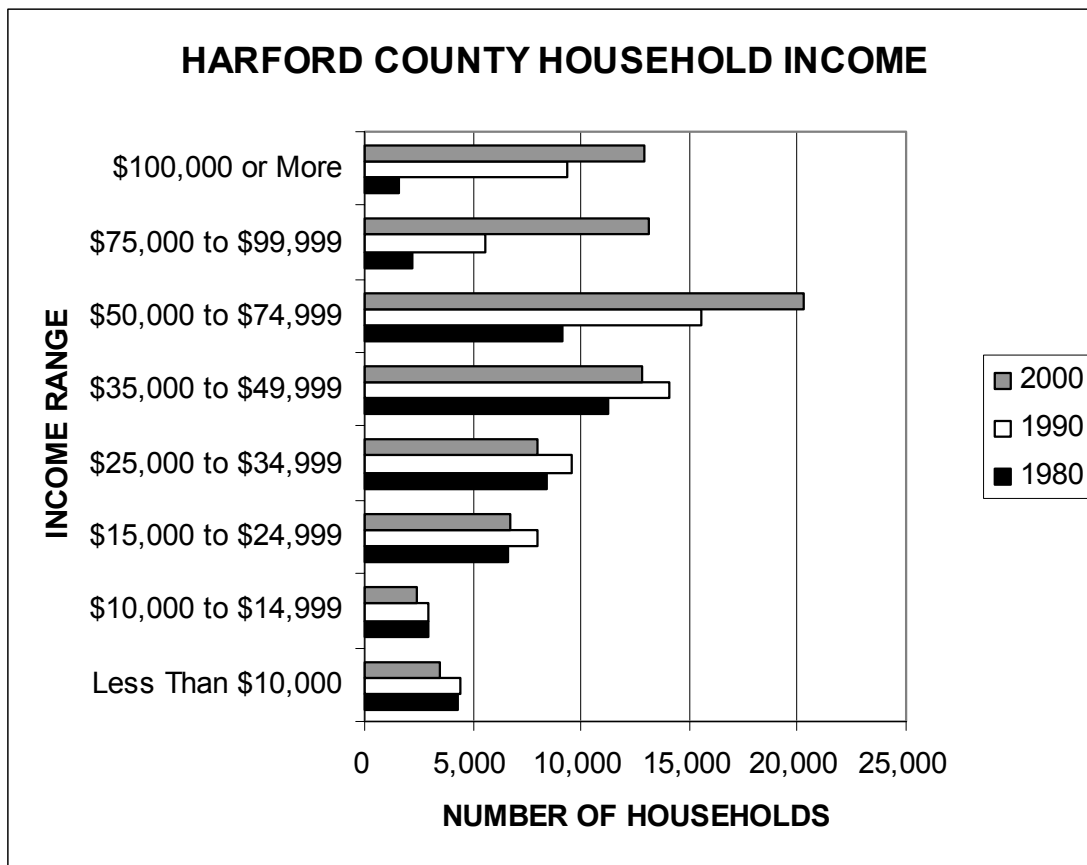


Figure 11

OCCUPATION

The occupation of residents in Harford County, based on employed individuals 16 years of age and over, is shown in (Figure 12). This figure identifies the top three occupations as Professional Specialty (24,681), Sales (23,553), and Administrative Support, including Clerical (18,111). Aberdeen Proving Ground remains the single largest employer in the County with approximately 6,900 civilian employees and approximately 3,900 military personnel.

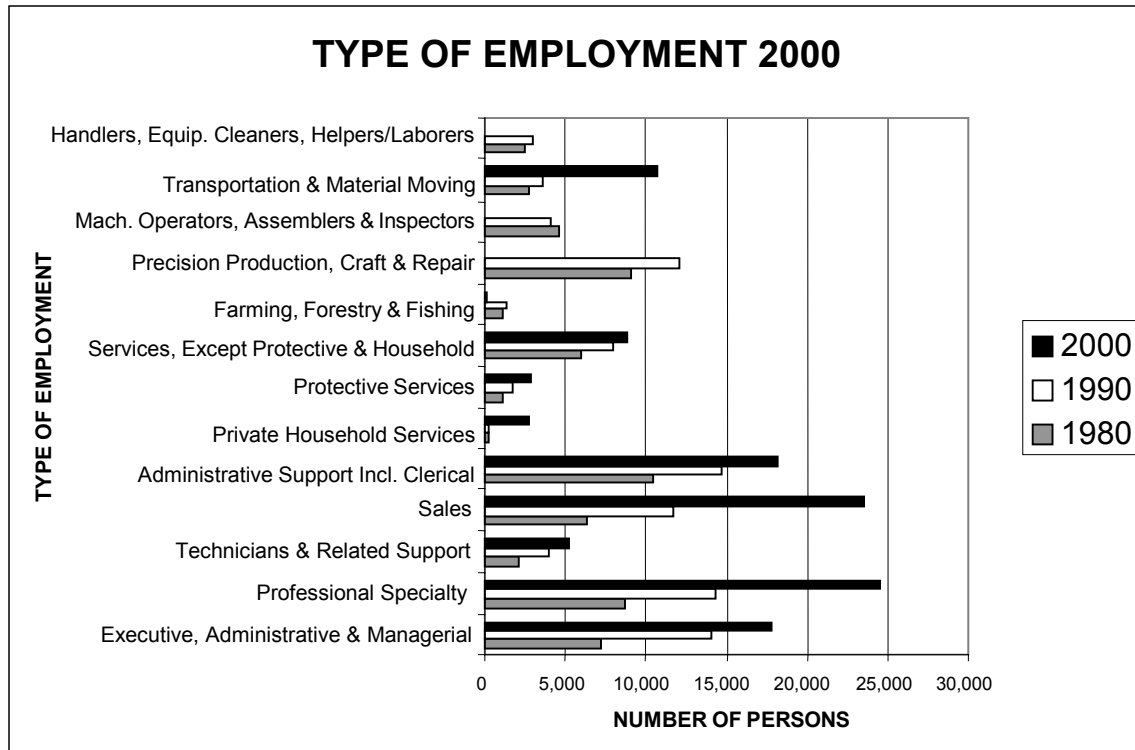


Figure 12

GROWTH PROJECTIONS

Several factors have contributed to Harford County's position as one of the fastest growing counties in the State. It is strategically located between Washington, D.C., and New York, it is part of the Baltimore Metropolitan Region, and several major transportation corridors cross its borders, including Interstate 95, U.S. Routes 1 and 40, and the CONRAIL, CSX, and AMTRAK rail lines.

Using the 2000 Census as a baseline, estimates have been made for 2005; these estimates were determined by a number of variables including building permits, average household size, and household vacancy rates. Projections for the five, 10 and 20-year periods beyond 2005 use the same information to build an anticipated rate of growth. It is important to note that projections also consider past trends and land availability.

While the County's residential building permit trends provide an indication of projected growth, permits vary from year to year depending on economic conditions. By observing trends in permit activity, improved projections of growth can be made (Figure 13). Using this data and assumptions about vacancy rates and average household size, population figures and the number of households were projected through the year 2025.

Residential Permits Issued by Jurisdiction Since 1990

Year	Total Permits	Harford County	Aberdeen	Bel Air	Havre de Grace
1990	2,498	2,390	41	9	58
1991	2,011	1,901	25	13	72
1992	2,399	1,903	48	234	214
1993	1,756	1,538	32	15	171
1994	1,714	1,569	23	5	117
1995	1,534	1,374	63	4	93
1996	1,856	1,607	73	1	175
1997	1,565	1,447	33	8	77
1998	1,675	1,530	74	8	63
1999	1,830	1,665	49	24	92
2000	1,596	1,503	69	5	19
2001	1,912	1,868	20	5	19
2002	1,916	1,784	71	3	58
TOTAL	24,262	22,079	621	334	1228

Figure 13

POPULATION PROJECTIONS

Between 1990 and 2000 the County population increased by 36,458 people to 218,590. Population projections for the County as shown in (Figure 14) reflect an expected increase of 48,250 people between 2005 - 2025. During this period, the population distribution among the various age groups will also change. The largest shift in population is expected in the 65+ age group. This group will increase by 123%, which is indicative of the aging population of the County. Projections also indicate, however, that the 5-19 and 25-44 age groups are expected to increase by about 5%. (Figure 15).

Harford County's Population and Households 1990-2025

YEAR	POPULATION	HOUSEHOLDS
1990	182,132	63,193
1995	209,130	73,640
2000	218,590	79,667
*2005	234,715	87,540
*2010	254,585	96,090
*2015	268,220	103,215
*2020	276,500	109,150
*2025	282,965	113,900

Figure 14

*Department of Planning and Zoning estimate based on building permit activity and household size estimates.

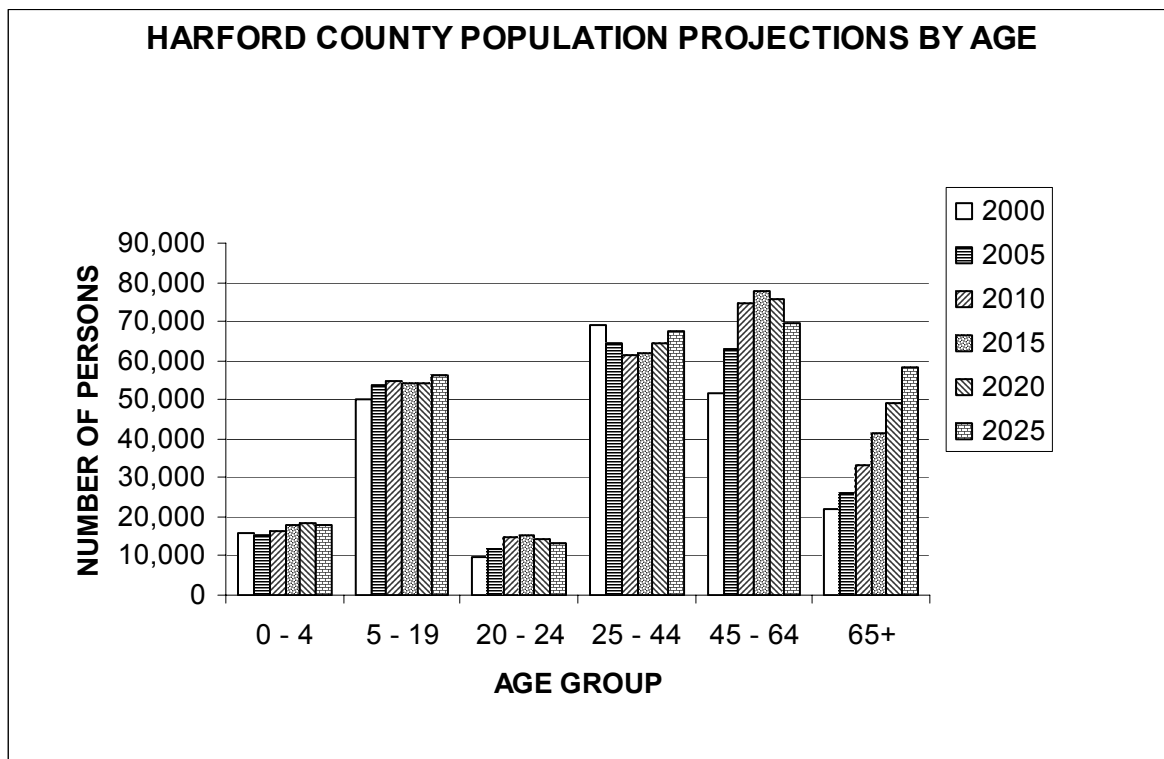


Figure 15

Source: Maryland Department of Planning & Harford County Planning & Zoning, Feb. 2003.

Since 1977, the guiding policy for land use decisions has been the focus of new growth within the Development Envelope. As Figure 16 demonstrates, over 70% of the County's population will be located within the Development Envelope by the year 2005. The estimated population of the Development Envelope in 2005 is 169,961 and this figure is expected to increase to 213,561 in the year 2025. This increase in population will directly correlate with the demand for new housing units within the County.

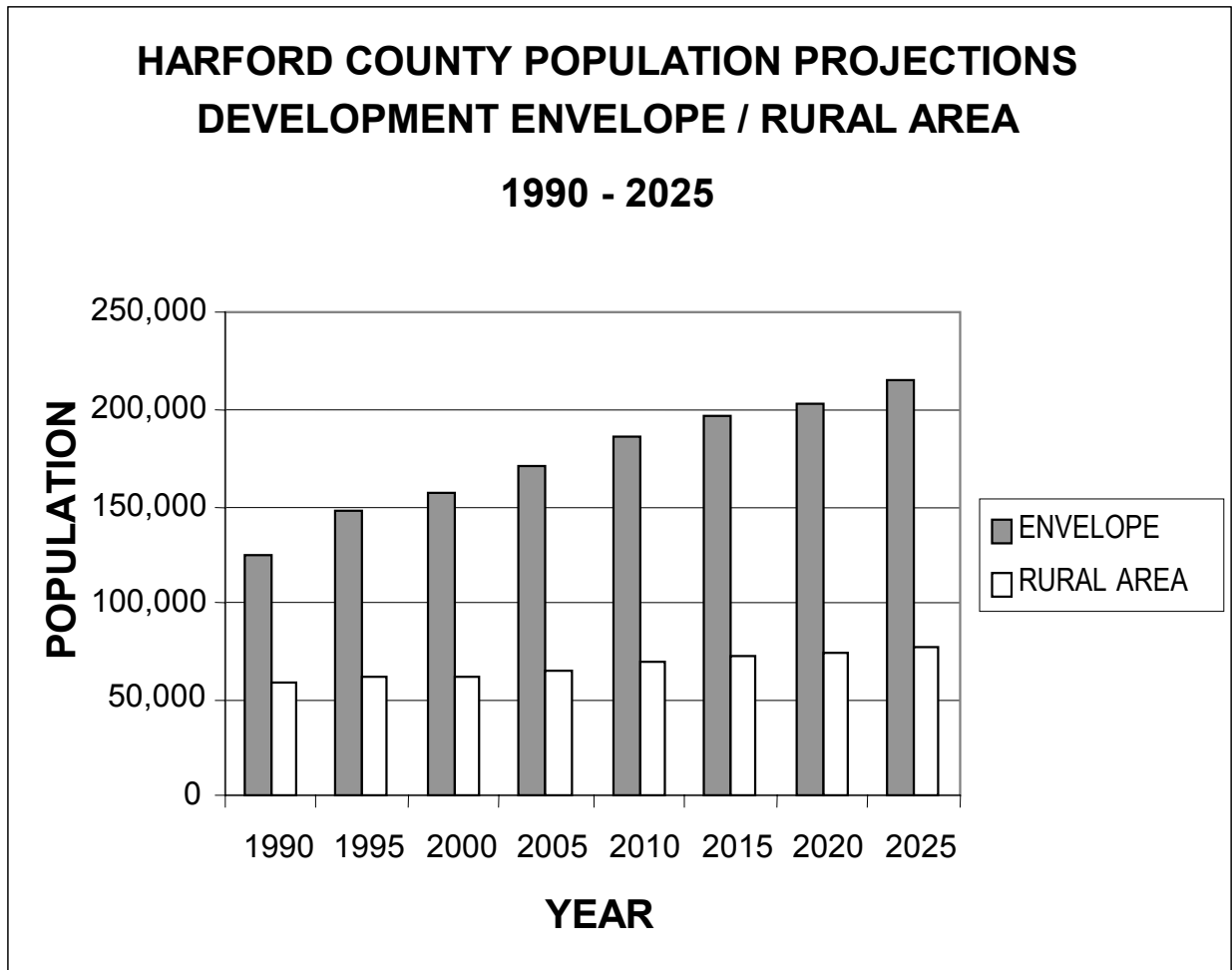


Figure 16

HOUSING PROJECTIONS

Population figures presented in Figure 17 directly reflect the increase in total households anticipated to occur between 2000 and 2025. For 2000, the number of occupied households within the County is 79,667 resulting in an overall increase of 20% since 1990. Of these 58,078 households, or 73% of the total number of households in the County, are located within the Development Envelope.

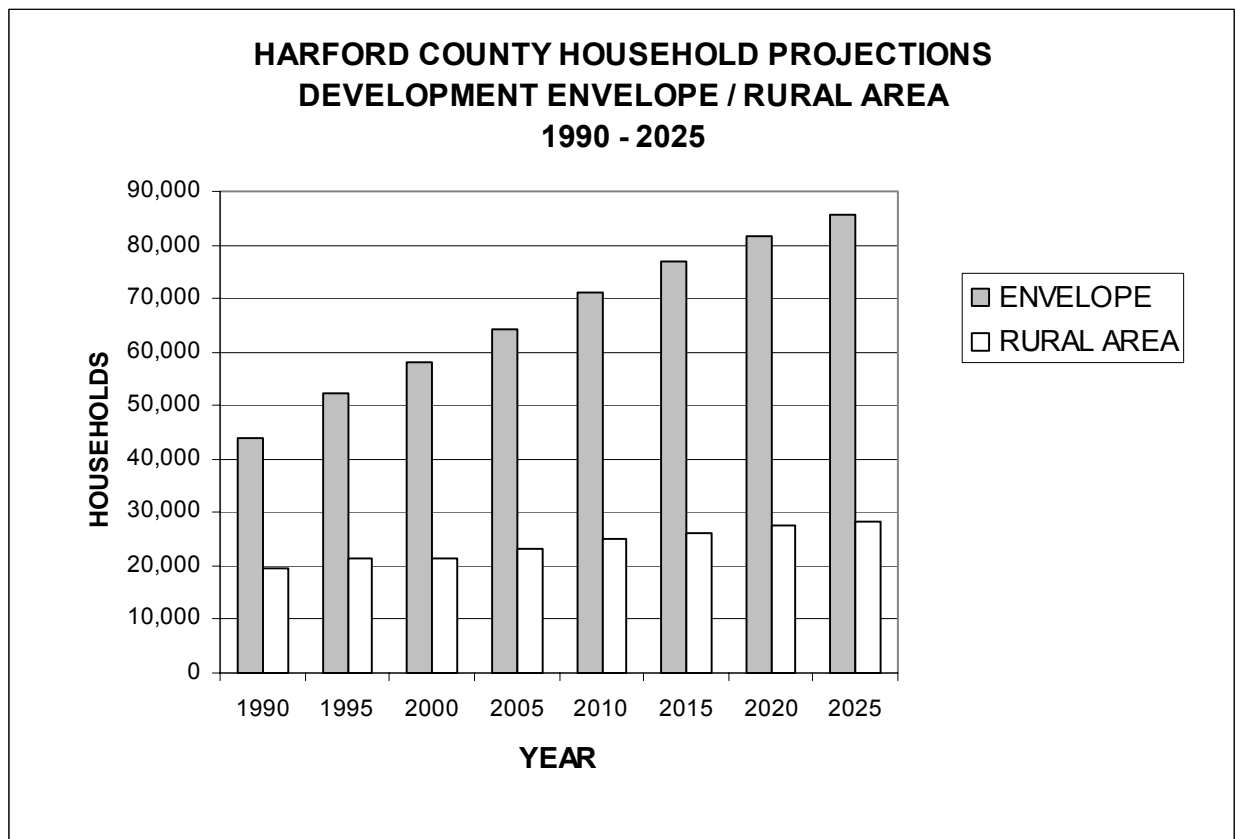


Figure 17

Between 2005 and the year 2025, the number of households countywide is projected to increase by 26,360. As identified in Figure 17, 75% (85,464) of the total number of households in 2025 are expected to be located within the existing Development Envelope. The remainder of the households, about 25%, will be located outside of the Development Envelope.

Development patterns support these projections. Since 1990, an average of 82% of the new residential development has occurred within the Development Envelope (Figure 18). Based on an average distribution rate of 80%, a total of 21,088 new households will be located within the Development Envelope by the year 2025.

Residential Permits Issued Since 1990

YEAR	TOTAL PERMITS	INSIDE ENVELOPE	% INSIDE	OUTSIDE ENVELOPE	% OUTSIDE
1990	2,498	2,069	82.8%	429	17.2%
1991	2,011	1,560	77.6%	451	22.4%
1992	2,399	2,005	83.6%	394	16.4%
1993	1,756	1,381	78.6%	375	20.4%
1994	1,714	1,434	83.6%	280	16.9%
1995	1,534	1,276	83.2%	258	16.8%
1996	1,856	1,575	84.9%	281	15.1%
1997	1,565	1,279	81.7%	286	18.3%
1998	1,675	1,328	79.3%	347	20.7%
1999	1,830	1,477	80.7%	353	19.3%
2000	1,596	1,292	81.0%	304	19.0%
2001	1,912	1,571	82.2%	341	17.8%
2002	1,916	1,572	82.0%	344	18.0%
TOTAL	24,262	19,819	81.7%	4443	18.2%

Figure 18

DEVELOPMENT ENVELOPE RESIDENTIAL LAND CAPACITY

A comprehensive residential/vacant land inventory was initially completed in 1995. This inventory was updated as of July 2003 to determine the residential holding capacity of the Development Envelope for the 2004 Land Use Element Plan. The update involved compiling data from four categories: approved preliminary plans with unbuilt units, planned units in process, the potential capacity of vacant undeveloped land, and municipal vacant land. These categories are defined as follows:

1. Approved preliminary plans - Subdivisions having preliminary plan approval were reviewed and the number of unbuilt units identified.
2. Planned units in process – Submitted concept and preliminary plans, that have not obtained preliminary plan approval status, were reviewed to determine estimated units and unit type yields.
3. Potential capacity of vacant undeveloped land - Vacant residentially zoned parcels, of two acres or more, were analyzed for environmental features, such as hydric soils, steep slopes, and streams/stream buffers, and for serviceability by public water and sewer. To estimate unit yield on the inventory of generally buildable land, an "average density factor" for each zoning type was derived from a representative sample of approved subdivisions.
4. Municipal vacant land - Data was obtained from the three municipalities, regarding vacant undeveloped land and approved plans.

Based on the analysis performed, there is an estimated capacity of approximately 18,672 units in the Development Envelope. The breakdown of the estimated capacity is as follows:

5,288	Planned unbuilt dwelling units remaining
1,154	Planned units in process
9,275	Undeveloped vacant land capacity (County/Municipal) sewer service area
2,955	Municipal residential land

An assessment of redevelopment/infill capacity throughout the existing envelope has identified an additional 3,600 units of capacity. This capacity estimate includes parcels that are mixed-use development opportunities and underutilized parcels. Therefore a total of 22,272 units would be available in the development envelope.

In addition to these numbers, Aberdeen and Havre de Grace have identified adjacent areas for possible annexation in their current comprehensive plans. The Cities of Aberdeen and Havre de Grace are each served by their own water and sewer facilities and the development of the area between the cities is dependent on sewer service through one of the municipal systems. These possible annexations could substantially increase the potential residential unit holding capacities in this area of the County. Based on the most recent plan updates of these cities, a maximum yield of about 8,000 units is estimated.

Based on an anticipated average rate of build-out of approximately 1,300 new units per year, there is sufficient residential land capacity within the Development Envelope to last approximately 17 years. For infrastructure planning purposes, it is important to identify the area served by the County's major wastewater treatment plant, Sod Run. The capacity of the service area is 19,175 units. Thus, the Sod Run portion of the Envelope is estimated to have sufficient capacity to last about 15 years. The majority of the remaining units, or 6,550 units are located in the Aberdeen-Havre de Grace area, and will be serviced by the municipal systems.

AGRICULTURAL LAND – RESIDENTIAL LAND CAPACITY

An inventory of the development potential of land in the rural area of the County was completed in June 2003. This study included land outside of the Development Envelope that is zoned Agricultural or Residential (Residential, Village Residential, and Rural Residential). Based on the analysis performed, there is an estimated capacity of approximately 12,636 units in the rural area of the County. The breakdown of the estimated capacity is as follows:

5,645	Agricultural land capacity on parcels not subdivided since 1977
1,728	Planned un-built dwelling units remaining
3,824	Remaining rights on subdivided parcels
168	Village residential remaining development potential
1,271	Rural residential remaining development potential

Given these numbers, it is not the intent of this Plan to encourage growth within the rural areas of the County. The Plan recognizes that some development will continue to occur outside of the Development Envelope, and this development should, to the degree possible, be directed to the Rural Villages and Rural Residential areas. Based on the average rate of 320 residential units permitted in the rural area over the past 10 years, there is sufficient residential land inventory.

COMMERCIAL AND INDUSTRIAL CAPABILITIES

Commercial

Using the assumptions and methodology of the 1997 Legg Mason retail growth analysis, a study was completed to determine the estimated retail growth likely to occur in Harford County between 2000 - 2025. Completed in December 2002, the study indicates that there are 13.4 million square feet of existing commercial space, of which 9.4 million square feet is retail space, and 2,643 acres of vacant commercial land in the County. Of the commercial land inventoried, 5.7 million square feet (42.7%) of the overall existing commercial space, and 348.3 acres (13.2%) of the overall vacant commercial land are located within the municipalities of Aberdeen, Bel Air, and Havre de Grace. Almost half of the County's developable commercial land - 1,250 acres or 47.3% is zoned CI.

The amount of retail space that is supportable by an area is based on three factors: growth in the number of households, spendable income, and that portion of residential expenditures for retail merchandise that occurs outside of the County. In 2000, Harford County's 79,667 households (including Aberdeen Proving Ground) had an aggregate household income of \$5.4 billion. The

number of households projected for 2025 is expected to increase by 23,082 with an aggregate household income of \$6.9 billion. Retail consumer expenditures for 2000 totaled \$1.7 billion. The projected residential growth will cause Harford County's retail demand to reach approximately \$2.1 billion in the year 2025.

Comparing projected demand and gross land capacity through 2025, Harford County has a sufficient amount of commercially zoned land to accommodate projected needs. By 2025, it is estimated that 41.1% of the overall retail capacity will be utilized, and there will be a surplus of total retail supportable space equaling 13.8 million square feet.

Industrial

A balanced tax base is important for Harford County's financial future. It is in the public's interest to have a sufficient inventory of industrially zoned properties served by public water and sewer and located in proximity to major transportation networks. To ensure that adequate areas are designated for these uses, the County updated the 1995 industrial land inventory in 2002. The inventory contains 862 sites, some of which may be partially or completely developed. These sites encompass 8,874 acres of land currently zoned for industrial use in Harford County.

In the Development Envelope there are a total of 773 industrial sites containing 7,969 acres of land. Of these, 315 sites (5,314 acres) are partially or completely undeveloped. Outside the Development Envelope there are 89 industrial sites encompassing 905 acres. Of this total, there are 43 sites (694 acres) that are partially or completely undeveloped.

While the study shows that the County has a variety of different sized parcels available for industrial use, approximately 5% of the total sites are over 100 acres as compared to almost 10% in 1995. The percentage of sites less than 10 acres now constitutes 56% of the available sites compared to 27% in 1995. However, the 1996 Plan included the designation of Mixed Office areas at selected interchanges to provide for additional employment opportunities.

LAND USE MAP: DESIGNATIONS

The Land Use Map represents a generalization of planned land use patterns and intensities, as well as the policies concerning the level and location of development for the next 10 years. Areas beyond the Development Envelope that do not already have public utilities should remain in agricultural or rural residential use. The land use categories depicted on the map are explained below. Low, medium, and high-intensity areas are located in the Development Envelope (Figure 19). Commercial shopping facilities shown on the map include neighborhood, community, and town centers within the Development Envelope, and rural villages outside the Development Envelope.

It is important to note that the categories of use on the map are not meant to be exclusive, and it is not expected that the uses in an area will be limited to a single land use. For instance, while most commercial activity in the County is expected to be located in and around the centers referred to above additional isolated commercial activity may occur throughout the low, medium, and high intensity areas. Such uses should be consistent with the definition of each category and compatible with adjacent uses. In addition, other land uses not directly related to agriculture may occur in the County's rural area so long as they do not significantly modify the character of areas outside of the Development Envelope.

LAND USE: MAPPING DEFINITIONS

Agricultural - Areas where agriculture is the primary land use, but where development rights are available. Residential development is possible at a density of 1.0 dwelling unit for every 10 acres. Commercial uses within this area are intended to serve the agriculture industry or residents of the area while maintaining the character of the surrounding countryside.

Rural Residential - Areas of focused rural development within the agricultural area, which allow low intensity residential opportunities while maintaining the character of the surrounding countryside. Water and sewer services are not planned for these areas. Residential density is limited to 1.0 dwelling unit per 2 acres.

Low Intensity - Areas within the Development Envelope where residential development is the primary land use. Density ranges from 1.0 to 3.5 dwelling units per acre. Neighborhood commercial uses such as convenience stores, doctors' offices, and banks are examples of some of the nonresidential uses associated with this designation.

Medium Intensity - Areas within the Development Envelope where residential development is the primary land use. Density ranges from 3.5 to 7.0 dwelling units per acre. Grocery stores, variety stores, and other commercial uses are examples of some of the more intensive uses associated with this designation.

High Intensity - Areas within the Development Envelope where residential development occurs at a density greater than 7.0 dwelling units per acre. Major retail commercial centers and highway-related businesses, such as automobile dealerships and home improvement centers, are examples of some of the most intensive uses associated with this designation.

Rural Villages - Areas of concentrated residential, commercial, and institutional uses located within the agricultural and rural residential areas that support the character and economy of the surrounding communities by providing necessary goods and services.

Neighborhood Centers - Areas of limited commercial activities such as convenience stores and service oriented uses that serve surrounding residences.

Community Centers - Areas combining civic, social, and cultural facilities with more intensive commercial and service oriented activities. These centers are usually located along major highways.

Town Centers - Areas of commercial activity, government services, office facilities, and cultural activities located within the County's three incorporated municipalities of Aberdeen, Bel Air, and Havre de Grace. Areas directly adjacent to the municipal boundaries may include high-intensity land uses.

Industrial/Employment - Areas of concentrated manufacturing, distribution, technical, research, office, and other activities generally located along major transportation corridors.

Mixed Office - Areas designed to promote major economic development opportunities such as corporate offices, research and development facilities, and high-tech services which create significant job opportunities and investment benefits. This area may also include limited retail uses to service the employment center. Designated at strategic I-95 interchanges, development will be subject to specific performance, architectural, and site design standards.

HEAT - Area designated for the Higher Education and Applied Technology Center, a planned higher education and research and development park. The HEAT initiative brings the finest of Maryland's institutions of higher education together to offer programs that are in demand by residents and businesses. The HEAT Center is located in Aberdeen at MD 22 and I-95.

HCC - Harford Community College is a public community college. The College is located on Thomas Run Road, three miles east of Bel Air. The College provides high quality, accessible and affordable educational opportunities and services that promote professional competence and economic development and improve the quality of life in a multicultural community.

APG – Aberdeen Proving Ground was established in 1917 to provide a military facility where design and testing of weapons could be carried out in close proximity to the nation's industrial and shipping centers. Aberdeen Proving Ground occupies more than 39,000 acres and comprises two principal areas separated by the Bush River, the Aberdeen area and the Edgewood area. APG is a key element in the nation's defense, providing testing, laboratory research and military training. More than 6,900 civilians work at APG making it Harford County's largest employer. In addition, 3,900 military personnel are assigned to APG and nearly 3,000 contractors and private business employees work at the Proving Ground.

Chesapeake Bay Critical Area - Areas generally within 1,000 feet of tidal waters and tidal wetlands, including expansion areas necessary for the protection of identified sensitive natural features and natural habitat protection areas.

State and County Parks - Areas of land generally designated for public open space and recreation. These areas also include some lands that provide specialized uses such as Stoney Forest Demonstration Area and Harford Glen Environmental Education Center.

Click box to view Figure 19
Land Use Map

NATURAL FEATURES MAP: MAPPING DEFINITIONS

The Natural Features Map (Figure 20) identifies specific resources that affect the usability of the designations shown on the Land Use Map. The features depicted on the map are representative of policies and preservation programs currently being implemented by the County. Areas shown on the map that are related to regulatory programs and policies are subject to specific guidelines for management and development. Resources shown on the map include:

Chesapeake Bay Critical Area - In addition to the 1,000-foot boundary, the three land use management areas are shown: Intensely Developed Areas (IDA), Limited Development Areas (LDA) and Resource Conservation Areas (RCA).

Intensely Developed Areas - Areas where residential, commercial, institutional, and/or industrial land uses predominate and where relatively little natural habitat occurs. This is where development will continue to be concentrated.

Limited Development Areas - Areas where land use intensity is moderate and some natural habitat still occurs. Low and medium intensity development will continue to occur here.

Resource Conservation Areas - Areas where the protection of natural environments and resource utilization (agriculture, forestry, fishery activities) are the primary use. Any future development shall minimize impacts on the natural features of this area and will be limited to very low intensity.

Stream Systems – All stream systems in the County are regulated as part of the Natural Resource District. The streams shown on the Natural Features Map represent only a portion of the overall County stream system.

Deer Creek Scenic River District - This represents the area included in the State Wild and Scenic Rivers Program which established 150-foot buffers on both sides of the creek to preserve its natural beauty.

Habitat Areas - Areas of ecological value that have received local, State, and/or Federal recognition for their uncommon or unique species. The locations on the map are approximate.

Sensitive Species Project Review Areas – Sensitive Species Project Review Areas (SSPRA) represents the general locations of documented rare, threatened and endangered species. This data assists in compliance with the Economic Growth, Resource Protection and Planning Act of 1992 and aids in streamlining the process of reviewing proposed projects for potential impacts to rare, threatened and endangered species and other regulated Wildlife and Heritage Service resources.

Preservation Areas – Areas also identified on the Preservation Areas Map (Figure 35) represent private lands that have voluntarily been placed into programs to conserve valuable natural features or resources. Uses being planned for areas adjacent to these sites should be compatible and, where possible, enhance existing preservation areas. The areas shown on the Map include:

Agricultural Preservation Areas - These areas represent farms that are protected either as part of an agricultural district or through agricultural easements. Farms with agricultural easements have been placed into a protection program that preserves the agricultural use of the land in perpetuity. Development inconsistent with the easement will not be allowed. Agricultural districts are five year agreements with landowners not to residentially subdivide their property prior to the five year commitment.

Maryland Environmental Trust Easements - Private lands that have been placed into a protection program to preserve their ecological value. Development inconsistent with the easement will not be allowed.

Rural Legacy - Areas where preservation efforts, through easements or fee simple acquisitions, are focused to form large contiguous tracts of protected land. Development inconsistent with the easement will not be allowed.

Maryland Historical Trust Easements - Private lands that have been placed into a protective program to preserve their historic value.

Click box to view Figure 20
Natural Features Map